What is claimed is:

1. A method of controlling a storage system,

said storage system including a host computer, and a storage
control device that is connected to said host computer to be able
to communicate therewith and that is for inputting/outputting
data to/from a storage device based on a data input/output request
sent from said host computer;

said storage control device performing: a first control for
managing a storage area in said storage device using a logical
volume that is a logical storage area created on said storage area
and storing, in said logical volume, management information that
enables an operating system running on said host computer to manage
said logical volume; a second control for controlling duplication
of data in a first logical volume also to be stored on a real-time
basis in a second logical volume that is different from said first
logical volume; and a third control for making a logical volume
identifier and a data set identifier for said first logical volume
that are described in the management information in said first
logical volume and a logical volume identifier and a data set
identifier for said second logical volume that are described in
the management information in said second logical volume match
each other while said real-time duplication is being performed;

said method comprising:

said storage system generating a control program for
performing a process for setting said logical volume identifier
and said data set identifier for said first logical volume, which
are described in said management information in said first logical
volume, and said logical volume identifier and said data set
identifier for said second logical volume, which are described
in said management information in said second logical volume, to

be different from each other; and

said storage system interrupting said duplication and then executing said control program.

5   2.   A method of controlling a storage system set forth in claim 1, wherein

said control program includes a control program for interrupting said real-time duplication; and

said interruption of said real-time duplication is
10   performed by executing said control program.

3.   A method of controlling a storage system set forth in claim 1, wherein

said operating system manages said logical volumes by
15   recording them in a catalog; and,

when said second logical volume is being made to be recognized by said operating system as a logical volume independent of said first logical volume, said second logical volume is recorded in a catalog different from that of said first
20   logical volume.

4.   A method of controlling a storage system set forth in claim 1, wherein

said operating system manages said logical volumes by
25   recording them in a catalog; and,

when said second logical volume is being made to be recognized by said operating system as a logical volume independent of said first logical volume, said second logical volume is recorded in the same catalog as that of said first logical
30   volume.

5.   A method of controlling a storage system set forth in claim 1, further comprising:

when said second logical volume is being made to be recognized by said operating system as a logical volume

5   independent of said first logical volume, said storage system generates a control program for performing a process for setting said logical volume identifier and said data set identifier for said first logical volume, which are described in said management information in said first logical volume, and said logical volume

10 identifier and said data set identifier for said second logical volume, which are described in said management information in said second logical volume, to be the same as each other and for restarting said real-time duplication; and

said storage system restarts said real-time duplication by

15 executing said control program.

6.   A method of controlling a storage system set forth in claim 1, wherein

said management information includes VTOC.

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7.   A method of controlling a storage system set forth in claim 1, wherein

said management information includes management information about VSAM in case a data set is managed according

25 to a VSAM format.

8.   A method of controlling a storage system set forth in claim 1, wherein

said second logical volume is provided by a storage control

30 device connected to said storage control device, to be able to communicate therewith, that provides said first logical volume.

9.   A storage system comprising:

a host computer; and

a storage control device that is connected to said host

5 computer to be able to communicate therewith and that is for

inputting/outputting data to/from a storage device based on a data

input/output request sent from said host computer, wherein

said storage system:

managing a storage area provided by said storage device

10 using a logical volume that is a logical storage area created on

said storage area;

storing, in said logical volume, management information

that enables an operating system running on said host computer

to manage said logical volume;

15   controlling duplication of data in a first logical volume

also to be stored on a real-time basis in a second logical volume

that is different from said first logical volume; and

making a logical volume identifier and a data set identifier

for said first logical volume that are described in the management

20 information in said first logical volume and a logical volume

identifier and a data set identifier for said second logical volume

that are described in the management information in said second

logical volume match each other while said real-time duplication

is being performed;

25   said storage system further comprising:

means for generating a control program for performing a

process for setting said logical volume identifier and said data

set identifier for said first logical volume, which are described

in said management information in said first logical volume, and

30 said logical volume identifier and said data set identifier for

said second logical volume, which are described in said management

information in said second logical volume, to be different from each other; and

means for executing said control program after interrupting said real-time duplication to make said second logical volume be
5   recognized as being accessible by said operating system either as a logical volume independent of said first logical volume or as a data set independent of a data set within said primary logical volume.

10   10.   A computer-readable storage medium having a program to be executed by a storage system recorded thereon,

said storage system including: a host computer; and a storage control device that is connected to said host computer to   be   able   to   communicate   therewith   and   that   is   for
15   inputting/outputting data to/from a storage device based on a data input/output request sent from said host computer, and

said storage system: managing a storage area provided by said storage device using a logical volume that is a logical storage area created on said storage area; storing, in said logical
20   volume, management information that enables an operating system running on said host computer to manage said logical volume; controlling duplication of data in a first logical volume also to be stored on a real-time basis in a second logical volume that is different from said first logical volume; and making a logical
25   volume identifier and a data set identifier for said first logical volume that are described in the management information in said first logical volume and a logical volume identifier and a data set identifier for said second logical volume that are described in the management information in said second logical volume match
30   each other while said real-time duplication is being performed;

said   program   making   said   storage   system   realize   the

functions of:

generating a control program for performing a process for setting said logical volume identifier and said data set identifier for said first logical volume, which are described in
5   said management information in said first logical volume, and said logical volume identifier and said data set identifier for said second logical volume, which are described in said management information in said second logical volume, to be different from each other; and

10   executing said control program after interrupting said duplication to make said second logical volume be recognized as being accessible by said operating system as a logical volume independent of said first logical volume.

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